

Amendments to the Claims:

Claims 5, 6, 9 – 14 and 18 – 19 have been withdrawn.

Claims 1-4, 7, 8, 15-17 and 20 have been canceled.

New claims 21 to 39 have been added.

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

21. (new) An isolated polynucleotide comprising a polynucleotide sequence selected from the group consisting of:

- a.) an isolated polynucleotide having a nucleotide sequence at least 82.0% identical to SEQ ID NO:12
- b.) an isolated polynucleotide encoding a human RET16.2 polypeptide;
- c.) an isolated polynucleotide encoding a polypeptide corresponding to amino acids 2 to 384 of SEQ ID NO:13 minus the start codon;
- d.) an isolated polynucleotide encoding a polypeptide corresponding to amino acids 1 to 384 of SEQ ID NO:13 including the start codon;
- e.) the polynucleotide according to any one of (a) through (d), having the nucleic acid sequence of ATCC Accession No. PTA-3161;
- f.) a polynucleotide which is fully complementary to the polynucleotide according to any one of (a) through (e),
- g.) an isolated and purified polynucleotide, or fragment thereof, encoding an amino acid sequence of a cell signaling polypeptide involved in the cell signaling cascade, said polypeptide having at least 82% sequence identity with the sequence of SEQ ID NO:13; and
- h.) an isolated and purified polynucleotide, or fragment thereof, having at least 68.2% sequence identity with the sequence of SEQ ID NO:12.

22. (new) The isolated polynucleotide of claim 21, wherein said polynucleotide is (a).

23. (new) The isolated polynucleotide of claim 21, wherein said polynucleotide is (b).

24. (new) The isolated polynucleotide of claim 21, wherein said polynucleotide is (c).

25. (new). The isolated polynucleotide of claim 24, wherein said polynucleotide comprises nucleotides 114 to 1262 of SEQ ID NO:12.

26. (new) The isolated polynucleotide of claim 21, wherein said polynucleotide is (d).

27. (new) The isolated polynucleotide of claim 26, wherein said polynucleotide comprises nucleotides 111 to 1262 of SEQ ID NO:12.

28. (new) The isolated polynucleotide of claim 21, wherein said polynucleotide is (e).

29. (new) The isolated polynucleotide of claim 21, wherein said polynucleotide is (f).

30. (new) The isolated polynucleotide of claim 21, wherein said polynucleotide is (g).

31. (new) The isolated polynucleotide of claim 21, wherein said polynucleotide is (h).

32. (new) A composition comprising the polynucleotide according to claim 21.

33. (new) An expression vector containing the polynucleotide according to claim 21.

34. (new) A host cell containing the expression vector according to claim 33.

35. (new) A method for producing a protein involved in the cell signaling cascade comprising the steps of:

- a) culturing the host cell according to claim 34 under conditions suitable for the expression of the polypeptide; and
- b) recovering the polypeptide from the host cell culture.

36. (new) A method of detecting a polynucleotide encoding a cell signaling cascade protein, or fragment thereof, in a biological sample, comprising the steps of:

- a) hybridizing the polynucleotide according to claim 21 to the nucleic acid material of the biological sample, thereby forming a hybridization complex; and
- b) detecting the hybridization complex, wherein the presence of the complex correlates with the presence of a polynucleotide encoding ubiquitin conjugating enzyme, or a fragment thereof, in the biological sample.

37. (new) An isolated polynucleotide consisting of a polynucleotide sequence selected from the group consisting of:

- a.) an isolated polynucleotide encoding a human RET16.2 polypeptide;
- b.) an isolated polynucleotide consisting of nucleotides 114 to 1262 of SEQ ID NO:12, wherein said nucleotides encode a polypeptide corresponding to amino acids 2 to 384 of SEQ ID NO:13 minus the start codon;
- c.) an isolated polynucleotide consisting of nucleotides 111 to 1262 of SEQ ID NO:12, wherein said nucleotides encode a polypeptide corresponding to amino acids 1 to 384 of SEQ ID NO:13 including the start codon;
- d.) an isolated polynucleotide having a nucleotide sequence at least 68.2% identical to SEQ ID NO:12
- e.) a polynucleotide which is fully complementary to the polynucleotide according to any one of (a) through (d),
- f.) an isolated and purified polynucleotide, or fragment thereof, encoding an amino acid sequence of a cell signaling polypeptide involved in the cell signaling cascade, said polypeptide having at least 82% sequence identity with the sequence of SEQ ID NO:13; and
- g.) an isolated and purified polynucleotide, or fragment thereof, having at least 68.2% sequence identity with the sequence of SEQ ID NO:12.

38. (new) A recombinant vector comprising the isolated nucleic acid molecule according to claim 37.

39. (new) A recombinant host cell comprising the recombinant vector according to claim 38.